

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 11/29/2018 Revision date: 11/29/2018 Supersedes: 03/15/2015

**SECTION 1: Identification** 

1.1. Identification

Product form : Mixture

Product name : Vibrocast 56SCHP

CAS-No. : Mixture Product code : 0392

Other means of identification : Alumina-Silicate Cement Bonded Castable

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Refractory

1.3. Supplier
Resco Products, Inc.

One Robinson Plaza, Suite 300

6600 Steubenville Pike

Pittsburgh, PA 15205 - United States

412-494-4491

SDS@RescoProducts.com - WWW.RescoProducts.com

1.4. Emergency telephone number

Emergency number : EMERGENCY ONLY (CHEMTREC) USA & Canada 1-800-424-9300

Outside USA & Canada +1 703-741-5970

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

**GHS US classification** 

Skin corrosion/irritation H315 Causes skin irritation

Category 2 Serious eye damage/eye H320

irritation Category 2B

H320 Causes eye irritation

Carcinogenicity Category

H350 May cause cancer (Inhalation)

1A

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

**GHS US labeling** 

Hazard pictograms (GHS US)





Signal word (GHS US) : Danger

Hazard statements (GHS US) : H315 - Causes skin irritation H320 - Causes eye irritation

H350 - May cause cancer (Inhalation)

Precautionary statements (GHS US) : P280 - Wear eye protection, Dust respirator, protective gloves.

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing

P332+P313 - If skin irritation occurs: Get medical advice/attention. P337+P313 - If eye irritation persists: Get medical advice/attention.

P260 - Do not breathe dust.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

# **SECTION 3: Composition/Information on ingredients**

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
silicon carbide	(CAS-No.) 409-21-2	50 - 75	Not classified
Calcium Aluminate Cement	(CAS-No.) 65997-16-2	5 - 10	Skin Irrit. 2, H315 Eye Irrit. 2B, H320
quartz	(CAS-No.) 14808-60-7	1 - 5	Carc. 1A, H350
cristobalite	(CAS-No.) 14464-46-1	1 - 5	Carc. 1A, H350

Full text of hazard classes and H-statements : see section 16

### **SECTION 4: First-aid measures**

**4.1. Description of first aid measures** First-aid measures general

: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

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First-aid measures after inhalation Allow victim to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact Wash with plenty of soap and water. Wash contaminated clothing before reuse.

First-aid measures after eye contact IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present

: Based on available data, the classification criteria are not met.

and easy to do. Continue rinsing.

Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. First-aid measures after ingestion

Most important symptoms and effects (acute and delayed)

Potential Adverse human health effects and

symptoms

Symptoms/effects after inhalation : May cause cancer by inhalation. Danger of serious damage to health by prolonged exposure

> through inhalation. Causes skin irritation. Causes eye irritation.

Symptoms/effects after eye contact Immediate medical attention and special treatment, if necessary

No additional information available

Symptoms/effects after skin contact

### **SECTION 5: Fire-fighting measures**

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media No unsuitable extinguishing media known.

Specific hazards arising from the chemical

Fire hazard Not flammable. Reactivity : Hydraulic setting.

Special protective equipment and precautions for fire-fighters 5.3.

Firefighting instructions : Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering

environment.

Protection during firefighting Do not enter fire area without proper protective equipment, including respiratory protection.

### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

**Emergency procedures** : Do not breathe dust.

For emergency responders 6.1.2.

Protective equipment : Equip cleanup crew with proper protection.

**Emergency procedures** : Ventilate area.

**Environmental precautions** 

Prevent entry to sewers and public waters.

Methods and material for containment and cleaning up 6.3

Methods for cleaning up : On land, sweep or shovel into suitable containers. Minimize generation of dust.

Reference to other sections

See Heading 8. Exposure controls and personal protection.

# **SECTION 7: Handling and storage**

**Precautions for safe handling** 

: Do not handle until all safety precautions have been read and understood. Avoid raising dust. Precautions for safe handling

Avoid contact with skin and eyes. Do not breathe dust.

Hygiene measures Wash hands and other exposed areas with mild soap and water before eating, drinking or

smoking and when leaving work.

Conditions for safe storage, including any incompatibilities

Store this product in a dry location where it can be protected from the elements. Storage conditions

Incompatible products Strong bases. Strong acids.

### SECTION 8: Exposure controls/personal protection

### Control parameters

on the parameter	1010				
Calcium Aluminate Ce	Calcium Aluminate Cement (65997-16-2)				
Not applicable					
cristobalite (14464-46-	cristobalite (14464-46-1)				
ACGIH	ACGIH TWA (mg/m³)  0.025 mg/m³ (Silica-Crystalline Cristobalite; USA; Time-weight exposure limit 8 h; TLV - Adopted Value; Respirable fraction)				
OSHA PEL (TWA) (mg/m³) 0.05 m		0.05 mg/m³ respirable dust			
silicon carbide (409-21-2)					
ACGIH	ACGIH TWA (mg/m³)  3 mg/m³ (Silicon carbide, nonfibrous; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value; Respirable fraction. The v for particulate matter containing no asbestos and < 1% crystalline s				
quartz (14808-60-7)					
ACGIH	ACGIH TWA (mg/m³)	0.025 mg/m³ (Silica-Crystalline Quartz; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value; Respirable fraction)			
OSHA	OSHA PEL (TWA) (mg/m³)	0.05 mg/m³ Respirable fraction			
OSHA	OSHA Remark (OSHA) (3) See Table Z-3.				

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### 8.2. Appropriate engineering controls

No additional information available

8.3. Individual protection measures/Personal protective equipment

### Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Wear protective gloves.

Eye protection:

Chemical goggles or safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

Wear appropriate mask **Other information:** 

Do not eat, drink or smoke during use.

### **SECTION 9: Physical and chemical properties**

### 9.1. Information on basic physical and chemical properties

Physical state : Solid

Appearance : Granular mixture.

Color : Gray

Odor : Earthy Odor
Odor threshold : Not applicable

pH : No data available

Melting point :  $> 2500 \,^{\circ}\text{F}$ Freezing point : Not applicable

Boiling point : Not applicable
Critical temperature : Not applicable

Critical pressure : Not applicable Flash point : Not applicable Relative evaporation rate (butyl acetate=1) : Not applicable Relative evaporation rate (ether=1) : Not applicable

Flammability (solid, gas)

: Non flammable.

Vapor pressure

: Not Applicable

Vapor pressure at 50 °C : Not Applicable Relative vapor density at 20 °C : No data available

Relative density :  $\approx 2.5$ 

Solubility : Slightly soluble.

Log Pow : No data available

Auto-ignition temperature : Not applicable

Decomposition temperature : No data available

Viscosity : Not Applicable

Viscosity, kinematic : Not Applicable
Viscosity, dynamic : Not Applicable
Explosion limits : Not applicable
Explosive properties : No data available
Oxidizing properties : No data available

9.2. Other information

No additional information available

### **SECTION 10: Stability and reactivity**

10.1. Reactivity

Hydraulic setting.

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Avoid dust formation.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

No additional information available

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SECTION 11: Toxicological informatio	n			
11.1. Information on toxicological effects				
Acute toxicity	: Not classified			
silicon carbide (409-21-2)				
LD50 oral rat > 2000 mg/kg body weight (Rat; OECD 423: Acute Oral Toxicity – Acute Toxic Class Me Experimental value)				
LD50 dermal rat	> 2000 mg/kg body weight (Rat; Experimental value; OECD 402: Acute Dermal Toxicity)			
Skin corrosion/irritation	: Causes skin irritation.			
Serious eye damage/irritation Respiratory or skin sensitization	: Causes eye irritation. : Not classified			
Germ cell mutagenicity	: Not classified			
Carcinogenicity	: May cause cancer (Inhalation).			
cristobalite (14464-46-1)				
IARC group	1 - Carcinogenic to humans			
silicon carbide (409-21-2)				
IARC group	2A - Probably carcinogenic to humans			
quartz (14808-60-7)				
IARC group	1 - Carcinogenic to humans			
Reproductive toxicity	: Not classified			
Specific target organ toxicity – single exposure	: Not classified			
Specific target organ toxicity – repeated exposure	: Not classified			
Aspiration hazard	: Not classified			
Potential Adverse human health effects and	: Based on available data, the classification criteria are not met.			
symptoms Symptoms/effects after inhalation	: May cause cancer by inhalation. Danger of serious damage to health by prolonged exposure through inhalation.			
Symptoms/effects after skin contact	: Causes skin irritation.			
Symptoms/effects after eye contact	: Causes eye irritation.			
SECTION 12: Ecological information				
12.1. Toxicity				
No additional information available  12.2. Persistence and degradability				
Vibrocast 56SCHP (Mixture)				
Persistence and degradability	Not established.			
cristobalite (1/1/6/-/6-1)	TWO GOLDSHOLLOW			
cristobalite (14464-46-1)	1 - 11111111111111111111111111111111111			
Persistence and degradability	Biodegradability: not applicable.			
Persistence and degradability Biochemical oxygen demand (BOD)	Biodegradability: not applicable.  Not applicable			
Persistence and degradability Biochemical oxygen demand (BOD) Chemical oxygen demand (COD)	Biodegradability: not applicable.  Not applicable  Not applicable			
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Persistence and degradability Biochemical oxygen demand (BOD) Chemical oxygen demand (COD) ThOD  silicon carbide (409-21-2) Persistence and degradability Biochemical oxygen demand (BOD) Chemical oxygen demand (COD) ThOD  quartz (14808-60-7) Persistence and degradability Biochemical oxygen demand (BOD) Chemical oxygen demand (BOD) Chemical oxygen demand (COD) ThOD  2.3. Bioaccumulative potential Vibrocast 56SCHP (Mixture)	Biodegradability: not applicable. Not applicable Not applicable Not applicable  Biodegradability: not applicable. Not applicable Not applicable Not applicable  Not applicable  Biodegradability: not applicable. Not applicable			
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Persistence and degradability Biochemical oxygen demand (BOD) Chemical oxygen demand (COD) ThOD  silicon carbide (409-21-2) Persistence and degradability Biochemical oxygen demand (BOD) Chemical oxygen demand (COD) ThOD  quartz (14808-60-7) Persistence and degradability Biochemical oxygen demand (BOD) Chemical oxygen demand (BOD) Chemical oxygen demand (COD) ThOD  2.3. Bioaccumulative potential Vibrocast 56SCHP (Mixture) Bioaccumulative potential  cristobalite (14464-46-1) Bioaccumulative potential	Biodegradability: not applicable. Not applicable Not applicable Not applicable  Biodegradability: not applicable. Not applicable			

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quartz (14808-60-7)	
Bioaccumulative potential	No bioaccumulation data available.

#### 12.4. **Mobility in soil**

No additional information available Other adverse effects

Effect on the global warming None known

Other information Avoid release to the environment.

### **SECTION 13: Disposal considerations**

#### **Disposal methods** 13.1.

: Dispose in a safe manner in accordance with local/national regulations.

Avoid release to the environment Product/Packaging disposal recommendations

Ecology - waste materials Avoid release to the environment.

## **SECTION 14: Transport information**

### **Department of Transportation (DOT)**

In accordance with DOT

Not regulated

**Transportation of Dangerous Goods** 

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

# **SECTION 15: Regulatory information**

### 15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

### 15.2. International regulations

### **CANADA**

No additional information available

### silicon carbide (409-21-2)

Listed on the Canadian DSL (Domestic Substances List)

### **EU-Regulations**

No additional information available

### **National regulations**

### silicon carbide (409-21-2)

Listed on IARC (International Agency for Research on Cancer)

### quartz (14808-60-7)

Listed on IARC (International Agency for Research on Cancer)

### 15.3. US State regulations

Vibrocast 56SCHP (Mixture)	
U.S California - Proposition 65 - Other information	This product contains crystalline silica, a chemical known to the state of California to cause cancer.
momaton	oddoc odrioor.

cristobalite (14464-46-1)					
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
Yes	No	No	No		

quartz (14808-60	-7)				
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
Yes	No	No	No		

# cristobalite (14464-46-1)

U.S. - New Jersey - Right to Know Hazardous Substance List

### silicon carbide (409-21-2)

U.S. - New Jersey - Right to Know Hazardous Substance List

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### quartz (14808-60-7)

U.S. - New Jersey - Right to Know Hazardous Substance List

### **SECTION 16: Other information**

Revision date : 11/29/2018

: Report language name. English. In the event of any conflict between English and other

language versions, the English version shall prevail.

### Full text of H-phrases:

Other information

H315	Causes skin irritation
H320	Causes eye irritation
H350	May cause cancer

### SDS US (GHS HazCom 2012)

This information and recommendations set forth herein are taken from sources believed to be accurate as of the date herein, however, Resco Products, Inc. makes no warranty with respect to the accuracy of the information or the suitability of the recommendations, and assumes no liability to any user thereof.

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